#### PATENT COOPERATION TREATY

# **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 33056P WO			THER ACTION	See Form PCT/IPEA/416			
Internatio	International application No.		filing date (day/month/year)	Priority date (day/month/year)			
PCT/EP2004/007390			•	11.07.2003			
Internatio	nal Patent Classification	(IPC) or national classificat	ion and IPC	1			
C070	C07C227/40						
Applicant							
DEGU	ISSA AG						
	This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.						
2.	This REPORT consists of	of a total of 5	sheets, includi	ng this cover sheet.			
3.	This report is also accon	panied by ANNEXES, com	prising:				
	a. (sent to the a	pplicant and to the Internati	ional Bureau) a total of 2	sheets, as follows:			
	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).						
	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental						
	Box. b. (sent to the li	nternational Bureau only) a	total of (indicate type and numb	er of electronic carrier(c))			
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		in computer readable form		, containing a sequence listing and/or tables emental Box Relating to Sequence Listing (see			
4.	This report contains indi	cations relating to the follow	ving items:				
	Box No. I	Basis of the report					
	Box No. II	Priority					
	Box No. III	Non-establishment of opin	ion with regard to novelty, inver	ntive step and industrial applicability			
. !	Box No. IV	Lack of unity of invention					
İ	Box No. V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			elty, inventive step or industrial applicability;			
	Box No. VI	Certain documents cited					
	Box No. VII	Certain defects in the interes	national application				
<u> </u>	Box No. VIII	Certain observations on the	international application				
Date of submission of the demand		Date of completion of the	his report				
Name and	mailing address of the I	PEA/EP	Authorized officer				
			T. 1				
Facsimile	NO.		Telephone No.				

Translation

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/007390

Box	No. I		Basis of the report		
1.			to the language, this report is based on the internation der this item.	al application in the language in	which it was filed, unless otherwise
			eport is based on translations from the original languages is the language of a translation furnished for the purpo		,
			international search (Rule 12.3 and 23.1(b))		
			publication of the international application (Rule 12.4)		
			international preliminary examination (Rule 55.2 and/o	or 55.3)	
2.	recei	iving Of report): the int	to the elements of the international application, this affice in response to an invitation under Article 14 are ternational application as originally filed/furnished escription:	report is based on (replacement s referred to in this report as "o	theets which have been furnished to the riginally filed" and are not annexed to
		pages			as originally filed/furnished
		pages	*	received by this Authority on	
		pages	*	received by this Authority on	
	$\boxtimes$	the cla	aims:		
		nos.			as originally filed/furnished
		nos.*		as amended (togethe	r with any statement) under Article 19
		nos.*	1-10	received by this Authority on	18.02.2005 with letter of 18.02.2005
		nos.*		received by this Authority on	
		the dr	awings:		
		sheets	5		as originally filed/furnished
		sheets	*	received by this Authority on	
		sheets			
	П	2 5001	uence listing and/or any related table(s) - see Suppleme		isting.
	$\Box$			Sinus Bost Normania to bequeened E	
3.	ш	The a	mendments have resulted in the cancellation of:		
		님	the description, pages		
		$\exists$	the claims, nos.		
		H	the sequence listing (specify):		
	_	ш	any table(s) related to sequence listing (specify):		
4.		This they l	report has been established as if (some of) the amend have been considered to go beyond the disclosure as fil	ments annexed to this report and ed, as indicated in the Supplemen	d listed below had not been made, since natal Box (Rule 70.2(c)).
			the description, pages		
			the claims, nos.		
		Ц	the drawings, sheets/figs		
			the sequence listing (specify):		
			any table(s) related to sequence listing (specify):		
	If ite	em 4 ap	plies, some or all of those sheets may be marked "supe	erseded."	

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/EP2004/007390

Box	No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	
1.	Statement		
	Novelty (	(N) Claims 1-10	YES
		Claims	NO
	Inventive	e step (IS) Claims 1-10	YES
		Claims	_ NO
	Industria	l applicability (IA) Claims 1-10	YES
		Claims	NO
2.	Citations and	d explanations (Rule 70.7)	
		D1: DE 25 03 582 A (BASF AG) 5 August 1976	
		(1976-08-05)	
		D2: EP-A-0 754 679 (SUEDDEUTSCHE KALKSTICKSTOFF)	
		22 January 1997 (1997-01-22)	
		D3: DE 199 20 962 A (BASF AG) 16 November 2000	
		(2000-11-16)	
	1.	Novelty (PCT Article 33(2)):	
	1.1	A method is disclosed for reducing the	
		formaldehyde and/or cyanide content in	
		industrially produced solutions of sarcosine	
		salts, characterised in that the starting solution	
		is subjected to thermal treatment as per claim 1.	
	1,2	D1 discloses a method for producing sodium and	
		potassium sarcosinate, said compounds being	
		produced according to the Strecker synthesis. D1	
		does not disclose a method for reducing the	
		formaldehyde and/or cyanide content of those	
		compounds.	
	1.3	D2 discloses a method for producing creatine	

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

starting from sodium or potassium sarcosinate. The sodium or potassium sarcosinate used contains mainly methyliminodiacetic acid as impurity. A formaldehyde or cyanide impurity is not mentioned and the sarcosinate used can be used in the method claimed in D2 to produce creatine despite the impurities.

- 1.4 D3 discloses the production of sarcosine starting from industrial sarcosinate solutions. The salts and methylimidoacetic acids occurring as impurities are separated using an electrodialysis method.
- 1.5 None of documents D1-D3 discloses the claimed method.

The subject matter of claims 1-10 can therefore be considered novel.

- 2. Inventive step (PCT Article 33(3)):
- 2.1 The invention addresses the problem of developing a method for reducing the formaldehyde and/or cyanide content in industrially produced solutions of sarcosine salts.

The solution proposed by the applicant is the method as per claim 1.

2.2 The method as per claim 1 is not in any way suggested by D1-D3. D1 and D2 do not mention

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			
	whether formaldehyde and/or cyanide are present.			
	In D3, impurities are removed by electrodialysis.			
	The method as per claims 1-10 is therefore			
	considered inventive in view of D1-D3.			
3.	Industrial applicability (PCT Article 33(4)):			
	The subject matter of claims 1-10 is industrially			
	applicable.			